

can learn from the perspective offered by Hayes and Hofmann. Clearly, exciting challenges lie ahead in process-based psychotherapy.

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1. Hayes SC, Hofmann SG. *World Psychiatry* 2021; 20:363-75.
2. Weisz JR, Kuppens S, Ng MY et al. *Perspect Psychol Sci* 2019;14:216-37.
3. Jones PJ, Mair P, Kuppens S et al. *Clin Psychol Sci* 2019;7:1434-49.
4. Schueller SM, Muñoz RE, Mohr DC. *Curr Dir Psychol Sci* 2013;22:478-83.
5. Chorpita BF, Weisz JR. *Modular approach to therapy for children with anxiety, depression, trauma, or conduct problems (MATCH-ADTC)*. Florida: PracticeWise, 2009.
6. Weisz JR, Chorpita BF, Palinkas LA et al. *Arch Gen Psychiatry* 2012;69:274-82.
7. Castonguay LG, Beutler LE. *J Clin Psychol* 2006; 62:631-638.
8. Cho E, Bearman SK, Woo R et al. *J Clin Child Adolesc Psychol* (in press).
9. Weisz JR, Bearman SK. *Principle-guided psychotherapy for children and adolescents: the FIRST program for behavioral and emotional problems*. New York: Guilford, 2020.

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Trans-theoretical clinical models and the implementation of precision mental health care

Hayes and Hofmann's paper¹ provides a new framework to conceptualize psychological therapy as a process-based clinical intervention. The authors describe the history of cognitive behavioral therapy (CBT) in three waves and formulate the process-based orientation as the step beyond theoretical orientations. They outline a shift from protocols treating syndromes to idiographic approaches using process-based clinical strategies to adapt treatment to the complexity of patients' problems.

The main idea is to use knowledge derived from empirical findings on psychological change processes in CBT to tailor treatments to patients and include new evidence as it becomes available. Therefore, process-based therapy is presented as a conceptual framework open to new, empirically tested processes identified in international research on diverse samples and dedicated to the goal of evidence-based psychotherapy.

Overall, we welcome the development of process-based psychological therapy within the context of a larger trans-theoretical and integrative trend in clinical practice, training, and theory building. There is no general agreement on the conceptualization of psychological therapies, and clinical services differ largely between and within countries. Furthermore, treatment models are often combined intuitively in clinical practice. The task for psychotherapy research is to improve this clinical decision-making process by grounding it in empirical data².

Hayes and Hofmann observe that, despite the many theoretical developments, the practice of psychological therapies has

not seen a large improvement in success rates over the last decade. This conclusion of outcome research is receiving increasing attention and acceptance in the field². Therefore, it is no wonder that new modular and integrated concepts have emerged. The idea is to combine elements within or between different treatment orientations based on sound empirical data, with the goal of tailoring treatments to specific patient problems and needs¹⁻⁴.

Such trans-theoretical treatment concepts are complemented by recent transdiagnostic psychopathology research – for example, the Research Domain Criteria, the multivariate Hierarchical Taxonomy of Psychopathology, and network models. Psychological disorders are no longer seen as categorical entities, but as elements of a multidimensional and transdiagnostic model of psychopathology.

Beyond Hayes and Hofmann, we argue for a trans-theoretical perspective facilitated by data-informed clinical practice, research and training, and focusing particularly on patients not profiting from psychological therapies. Some recent and ongoing research trends can be delineated in this respect². These include the development of improved, standardized, freely available, and easy-to-apply measures; new efforts in replication; new statistical methods (e.g., machine learning) to analyze large cross-sectional as well as intensive longitudinal datasets; improved research on processes and mechanisms of change; a better dissemination and cross-cultural adaptation of interventions, including Internet services⁵; and a better implementation of outcome

monitoring and clinical navigation systems to support therapists to identify and treat patients at risk for treatment failure.

We see the chance for psychotherapy to become characterized by trans-theoretical, personalized, and evidence-based clinical practice and training. Implementing continuous multidimensional assessments in routine care and identifying negative developments early in treatment are particularly crucial. Given that the knowledge about moderators and mediators in our field is limited, any treatment application needs to be evaluated by its actual progress for the individual patient².

This development has the potential to help the field mature and to empower clinical interventions. The goal could be to move away from concepts based on average differences and broad clinical assumptions that are difficult to operationalize, and towards concrete outcomes and studies on subgroups of patients not profiting from treatment.

In recent years, concepts from precision mental health research and precision medicine have been introduced, driving these advancements forward^{6,7}. Rather than choosing between treatment protocols, the aim of these developments is to tailor treatment to individual patients using empirical data. Evidence-based personalization in clinical practice might be improved by combining research on treatment prediction and selection with research on digital feedback and the application of decision support systems⁸.

At treatment onset, therapists are provided with prognostic information, for exam-

ple based on machine learning approaches applied to large datasets in order to recommend the optimal treatment, treatment strategy, or therapist for an individual patient⁶. During treatment, therapists are made aware of patients at risk for treatment failure, dropout or self-harm by adaptive decision tools. Additionally, therapists are provided with feedback and clinical problem-solving tools to support treatment for these patients.

Currently, the implementation and prospective evaluation of such systems are rare. However, such studies and new developments are already on their way. For example, more than a decade of our department's research activity has resulted in the development of a digital decision support and navigation system called the Trier Treatment Navigator (TTN). The system combines outcome tracking, prediction, and prescription tools, providing continuous feedback to clinicians and supporting them to apply targeted clinical strategies at the onset of and during treatment.

The online navigation system includes two components of patient-specific treatment recommendations: a) a pre-treatment clinical strategy recommendation and b) adaptive recommendations and support tools for patients at risk for treatment failure.

The prospective evaluation on 538 patients showed an advantage in outcomes, with an effect size of about 0.3, when patients were treated with the recommended strategy during the first ten sessions. Furthermore, therapist symptom awareness, attitude, and confidence using the system were found to be significant predictors of outcome, while therapist-rated usefulness of such feedback moderated the feedback-outcome association^{2,8}.

A similar approach, the Leeds Risk Index (LRI), was developed based on a sample of 1,347 patients and prognostically tested on 282 patients in the Improving Access to Psychological Therapies (IAPT) programme, to recommend either low or high intensity treatments⁷. Results indicated that such stratified care improves efficiency by generating comparable outcomes with less treatment sessions.

The goal of these developments is the timely translation of research into clinical practice. Of course, many more prospective studies are necessary. However, in the future, the field might be better able to operationalize change processes, regarding both how patients experience them and how therapists induce them. These developments could be the basis of a trans-theoretical, process-based, personalized and

data-informed psychological treatment approach, which includes both an idiographic (e.g., intensive longitudinal assessments on single cases) and a nomothetic (e.g., large databases of patients and therapists) perspective. Such advancements could finally make a difference for patients previously not profiting from psychological interventions.

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1. Hayes SC, Hofmann SG. *World Psychiatry* 2021; 20:363-75.
2. Barkham M, Lutz W, Castonguay LG (eds). *Bergin and Garfield's handbook of psychotherapy and behavior change*, 7th ed. New York: Wiley, 2021.
3. Goldfried MR. *Am Psychol* 2019;74:484-96.
4. Castonguay LG, Constantino MJ, Beutler LE (eds). *Principles of change. How psychotherapists implement research in practice*. New York: Oxford University Press, 2019.
5. Kazdin AE. *Innovations in psychosocial interventions and their delivery*. New York: Oxford University Press, 2018.
6. Cohen ZD, DeRubeis RJ. *Annu Rev Clin Psychol* 2018;14:209-36.
7. Delgadillo J, Lutz W. *JAMA Psychiatry* 2020;77: 889-90.
8. Lutz W, Rubel JA, Schwartz B et al. *Behav Res Ther* 2019;120:103438.

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Do we really need a process-based approach to psychotherapy?

Hayes and Hofmann¹ discuss the neglect of processes of change in psychotherapy and the lessons we can learn from process research in the context of “third-wave” cognitive behavioral therapies (CBTs). They criticize the notion of psychiatric syndromes and argue that these newer therapies should be considered in the context of an idiographic approach to process-based functional analysis.

Although I do agree upon several of the arguments the authors put forward, there are a few issues on which my views are somewhat different. As to their critic to the latent disease model of psychiatry, they do not discuss the progress which is now being made by the network approach. This approach to psychopathology posits that mental disorders can be conceptualized

as causal systems of mutually reinforcing symptoms². The model has been used over the past decade to examine psychiatric comorbidity and developmental psychopathology, and is being applied to a variety of specific disorders, such as anxiety disorders, autism, depression, post-traumatic stress disorder, eating disorders, psychosis and psychopathy.

Hayes and Hofmann argue that in the 1980s the golden era of “protocols for syndromes” settled in, with an ignorance of the therapeutic processes involved in these CBT protocols. This observation may be partly correct, but it is important to note that the CBT movement has always emphasized the role of theory, and of basic research supporting this theory³. Nevertheless, the dominant paradigm has indeed been

evidence-based treatment. Expert committees have been providing guidelines for evidence-based treatment of mental disorders, thus “certifying” a given treatment for a given population based on its proven efficacy for that specific mental disorder in randomized controlled trials (RCTs).

It should be acknowledged that this approach has led to a number of evidence-based CBT treatments for many mental disorders⁴. At the same time, about 30-40% of patients cannot be successfully treated with current CBT protocols, including “third-wave” CBTs, such as acceptance and commitment therapy (ACT), compassion-focused therapy, mindfulness-based cognitive therapy (MBCT), meta-cognitive therapy, and functional analytic psychotherapy. Although “third-wave” therapies